REMARKS

Entry of the foregoing amendments is respectfully requested.

Summary of Amendments

Upon entry of the foregoing amendments, claims 4, 7, 10, 23, 24, 65, 99-100, 103-107, 109, 127 and 128 are amended, claim 113 is cancelled and claim 133 is added, whereby claims 1-67, 98-112 and 114-133 are pending, with claims 1, 103 and 131 being independent claims. Claims 45, 46, 55 and 67 are withdrawn from consideration.

Support for the amended claims can be found throughout the present specification and the original claims.

Applicants emphasize that the amendments to the present claims are without prejudice or disclaimer, and Applicants expressly reserve the right to prosecute the amended claims in their original, unamended form in one or more continuation and/or divisional applications.

Summary of Office Action

The restriction requirement is made final.

The drawings are objected to because Fig. 2-4 allegedly are unreadable.

The specification is objected to and the Examiner requests that trademarks be capitalized wherever they appear in the present specification.

Applicants note with appreciation that the rejection of claims 26, 27, 36 and 39 under 35 U.S.C. § 112, second paragraph, is withdrawn.

The provisional rejection of claims [1]-25, 40, 43, 44, 47-54, 58, 60-62, 66 and 98-102 under the judicially created doctrine of non-statutory obviousness-type double patenting as being unpatentable over allegedly conflicting claims 1, 3, 4, 8-13, 16, 17, 20, 21, 23-39, 45, 55, 56, 60-63, 65, 67-71, 73-86 and 99-103 of copending U.S. Patent Application Serial No. 10/681,204 is maintained.

Claims 4, 7-10, 13, 14, 16, 17, 19, 47, 59, 65, 98-100, 107, 109-112 and 127-130 are (newly) rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 101 and 102 under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is maintained and claims 129 and 130 are appended to this rejection.

The rejection of claims 1-8, 10, 19, 25-39, 41, 48, 49, 50, 54, 56-62, 64-66, 101 and 102 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,191,216 to Ganster et al. (hereafter "GANSTER") in view of U.S. Patent No. 5,470,585 to Gilchrist (hereafter "GILCHRIST") is maintained and claims 9, 11 and 12 are appended to this rejection.

The rejection of claims 23 and 24 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of Park et al., U.S. Pre-Grant Patent Application Publication 2004/0018227 (hereafter "PARK") is maintained and claims 103, 106-126, 129 and 130 are appended to this rejection.

Claims 23, 24, 103, 104, 106-126 and 129-132 are rejected under 35 U.S.C. § 103(a) as

allegedly being unpatentable over GANSTER in view of GILCHRIST and further in view of Bowditch, EP 0196364 (hereafter "BOWDITCH").

Claims 23, 24 and 103-132 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GANSTER in view of GILCHRIST and further in view of Blank et al., U.S. Patent No. 5,079,004 (hereafter "BLANK").

The rejection of claims 14 and 17 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of U.S. Patent No. 5,591,820 to Kydonieus et al. (hereafter "KYDONIEUS") is maintained.

The rejection of claim 17 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of U.S. Patent No. 4,920,172 to Daoud (hereafter "DAOUD") is maintained.

The rejection of claims 16 and 18 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of PARK and DAOUD is maintained.

The rejection of claims 13, 15, 16 and 18 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of PARK and KYDONIEUS is maintained.

The rejection of claims 40, 42-44, 51-53 and 63 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of Fechner et al., U.S. Pre-Grant Patent Application Publication 2004/0137075, is maintained.

The rejection of claims 98-100 under 35 U.S.C. § 103(a) as allegedly being unpatentable over

the combined teachings of GANSTER and GILCHRIST in view of Nomura, U.S. Pre-Grant Patent Application Publication 2001/0023156 (hereafter "NOMURA") is maintained.

The rejection of claims 20-22 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of NOMURA and Lee et al., U.S. Pre-Grant Patent Application Publication 2002/0086039 (hereafter "LEE") is maintained.

Response to Office Action

Withdrawal of the objections and rejections of record is respectfully requested, in view of the foregoing amendments and the following remarks.

Response to Objection to Drawings

The drawings are objected to because Fig. 2-4 allegedly are unreadable. New drawings are requested.

Applicants respectfully request withdrawal of this objection. Specifically, as set forth at page 28 and in particular, page 36 of the present specification, Fig. 2-4 represent black and white copies of a reference sample (untreated and undoped) and samples D to J which have been doped with silver glass (Fig. 2) and have in some cases been treated with (-radiation or stored for 6 months at 50° C (Fig. 3 and 4). As explained in Examples 6 to 8, the doping and treatment with radiation/heat did not result in a color change for most of the tested samples (a discoloration would be visible as (an increased number of) black dots on the black and white copies), as evidenced by the absence of any dots on the black and white copies of most of the tested samples. Accordingly, even if

new drawings were submitted, they would not look any different from the present drawings, i.e., they again would show nothing (i.e., no black dots or the like) for most of the samples.

Response to Objection to Specification

The specification is objected to and the Examiner requests that trademarks be capitalized wherever they appear in the present specification.

Applicants have made an effort to comply with the Examiner's request but note that some of the trademarks set forth at the top of page 4 of the present Office Action could not be found in the present specification. Clarification is respectfully requested.

Response to Provisional Claim Rejections under Doctrine of Obviousness-Type Double-Patenting

The provisional rejection of claims 1-25, 40, 43, 44, 47-54, 58, 60-62, 66 and 98-102 under the judicially created doctrine of non-statutory obviousness type double patenting as being unpatentable over allegedly conflicting claims 1, 3, 4, 8-13, 16, 17, 20, 21, 23-39, 45, 55, 56, 60-63, 65, 67-71, 73-86 and 99-103 of copending U.S. Patent Application Serial No. 10/681,204 is maintained.

Applicants again respectfully request that this rejection be held in abeyance until the Examiner has indicated allowable subject matter in the present application and in the copending application. Applicants will then decide whether it is necessary to file a Terminal Disclaimer.

Response to Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 4, 7-10, 13, 14, 16, 17, 19, 47, 59, 65, 98-100, 107, 109-112 and 127-130 are (newly) rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 101 and 102 under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is maintained and claims 129 and 130 are appended to this rejection.

Applicants submit that most of claims 4, 7-10, 13, 14, 16, 17, 19, 47, 59, 65, 98-100, 107, 109-112 and 127-130 have been amended, thereby rendering the corresponding rejections moot. Applicants point out that they disagree with the Examiner in this regard, but have nevertheless amended the claims to expedite the issuance of a patent with the claims submitted herewith.

Regarding the rejection of claim 59, Applicants respectfully submit that the use of the term "substantially" in combination with a property is entirely conventional. For example, a keyword search in the USPTO online database for issued U.S. patents which contain the term "substantially transparent" in a claim affords more than 6000 hits. Over the last two months alone, almost 50 U.S. patents with the term "substantially transparent" in at least one claim thereof have issued.

Regarding the rejection of claims 98-100 and 127-128, Applicants submit that these claims have been amended on the basis of the disclosure of Examples 6 to 8 in combination with Fig. 2-4.

With respect to the rejection of claims 101, 102, 129 and 130, Applicants submit that Japanese standard JIS 2801:2000 is an internationally recognized standard, as evidenced by the

attached copies of documents which have been downloaded from the Internet:

(1) http://www.landm.com.au/antibacterial.html,

(2) http://www.polygiene.com/?id=168 and

(3) http://www.bedfordshelf.co.uk/pdf/Microsoft%20PowerPoint%20-%20Quartermaster%20Active%20presentation.pdf (slides 1-3).

(In accordance with M.P.E.P.§ 609C(3), these documents are being submitted as evidence directed to an issue raised in the Office Action, and no additional fee or Certification pursuant to 37 C.F.R. §§ 1.97 and 1.98, or citation on a FORM PTO-1449 is believed to be necessary.)

Applicants submit that the rejections of claims 4, 7-10, 13, 14, 16, 17, 19, 47, 59, 65, 98-102, 107, 109-112 and 127-130 under 35 U.S.C. § 112, second paragraph, are either moot or unwarranted for at least all of the foregoing reasons and should be withdrawn, which action is respectfully requested.

Response to Rejection of Claims under 35 U.S.C. § 103(a) over GANSTER in View of GILCHRIST

The rejection of claims 1-8, 10, 19, 25-39, 41, 48, 49, 50, 54, 56-62, 64-66, 101 and 102 under 35 U.S.C. § 103(a) as allegedly being unpatentable over GANSTER in view of GILCHRIST is maintained for the reasons set forth in the previous Office Action, and claims 9, 11 and 12 are appended to this rejection. The rejection specifically asserts that GANSTER teaches that the polyurethanes disclosed therein may contain additives such as inorganic fillers, including titanium dioxide or zinc oxide together with glass fibers of 0.1-1 mm length and that it would allegedly have been obvious to combine GILCHRIST with GANSTER because the former teaches antimicrobial

medicinal glasses that may be in the form of a powder, granules, or woven into a dressing, as part of wound management products.

Applicants respectfully traverse this rejection as well. Specifically, it is again pointed out that GANSTER does not teach that the polyurethanes thereof may contain any additives, but merely teaches (in col. 3, lines 44-67) that the polyurethanes may contain additives conventional for polyurethanes such as (inorganic and organic) fillers, dyes, thickeners, extenders, resins etc. These conventional additives for polyurethanes include, *inter alia*, inorganically or organically based short fibers. Examples of inorganic fibers are glass fibers, such as glass fibers of 0.1 to 1 mm in length. Examples of organic fibers are fibers having a fiber length of >0.01 mm, for example fibers based on polyacrylic acids and the salts thereof and materials used as textile fibers, such as for example polyester or polyamide fibers. Neither of these fillers (fibers) is further mentioned, let alone used in any of the Examples of GANSTER. GANSTER also is silent as to any benefit which might be associated with the use of corresponding fillers and in particular, (glass) fibers.

GILCHRIST discloses a specific water-soluble glass which contains silver or a silver compound and may be "in the form of a powder, granules, woven into a dressing form, a sinter shaped in a particular way or used as filler in polymers for surface release." GILCHRIST fails to mention any glass fibers. GILCHRIST does mention the use of the glass described therein as, among many other applications, "a filler in polymers for surface release", but does not disclose, let alone recommend polyurethanes as examples of such polymers. The only specific examples of corresponding polymers mentioned in GILCHRIST are silicones and natural and synthetic rubbers, i.e., polymers which have virtually nothing in common with the polyurethanes of GANSTER.

Further, GILCHRIST on the one hand teaches that the silver containing glass disclosed therein can be used in a wide variety of forms and in a host of combinations with other materials but on the other hand illustrates only very few corresponding embodiments in at least some detail. The incorporation of a silver glass in any polymer, let alone a polyurethane, is clearly not specifically pointed out and/or illustrated by GILCHRIST. Applicants again submit that in view thereof, it is only with hindsight that one can arrive at the conclusion that one of ordinary skill in the art would be motivated to use the silver glass of GILCHRIST as a filler in the form of (short) glass fibers for the polyurethanes of GANSTER.

In this regard, it further is noted that articles which are made from the polyurethanes of GANSTER are not limited to articles which are to come into contact with skin. In this regard, col. 4, lines 45-67 of GANSTER may be particularly referred to. According to this passage, articles which may be made from the polyurethanes of GANSTER include, for example, orthopedic articles, cosmetic articles, cushioning overlays or inserts, and pressure distributing filling compositions for cushions or padding elements.

Accordingly, while for some of the articles that can be made from the polyurethanes of GANSTER the use of a filler and in particular, (short) glass fibers may seem to make sense, it is not seen which particular benefit is expected to be associated with the use of fillers and in particular, (short) glass fibers in articles such as bandages (and wound management articles in general) which are made from the polyurethanes of GANSTER. In other words, there is no motivation for one of ordinary skill in the art to include glass fiber filler in a wound management article which is made of a polyurethane according to GANSTER. Glass fibers are not normally used as extenders (fillers) for

polymers which are used in medicinal articles that are to come into (direct) contact with the human or animal body. In fact, it is not seen that someone would want to bring an article which comprises hard and prickly (short) glass fibers into direct contact with a wound and/or skin.

Applicants submit that for at least all of the foregoing reasons and the additional reasons set forth in response to the previous Office Action, one of ordinary skill in the art would not be motivated to combine the teachings of GANSTER and GILCHRIST and in particular, would not be motivated to use the silver-containing glass of the latter in the form of a glass fiber filler in a polyurethane wound management article of the former. Accordingly, the rejection of claims 1-8, 10, 19, 25-39, 41, 48, 49, 50, 54, 56-62, 64-66, 101 and 102 under 35 U.S.C. § 103(a) over GANSTER in view of GILCHRIST is unwarranted, wherefore withdrawal thereof is respectfully requested.

Response to Rejection of Claims under 35 U.S.C. § 103(a) over GANSTER in View of GILCHRIST and PARK

The rejection of claims 23 and 24 under 35 U.S.C. § 103(a) as allegedly being unpatentable over GANSTER in view of GILCHRIST and PARK is maintained for the reasons stated in the previous Office Action and claims 103, 106-126, 129 and 130 are appended to this rejection.

The rejection asserts that some of the features upon which Applicants allegedly have relied on the response to the rejection set forth in the previous Office Action are not recited in the rejected claims. The rejection further alleges that the term "superabsorber" is not defined in the present specification and that therefore, "a reasonable broad interpretation of said term would be any material capable of absorbing anything, because the term is not redefined in the specification to limit it to the absorption of liquids." Further, according to the present rejection, "the humectants

specifically recited in the office action mailed July 24, 2006 as well as other polymeric humectants taught by Park would reasonably read on the term superabsorber".

Applicants respectfully traverse this rejection again. As an initial matter, Applicants note that they have changed the term "superabsorber" to the more commonly used term (in English language documents) "superabsorbent".

Further, contrary to what is alleged in the present Office Action, the terms "superabsorber" and "superabsorbent" are terms of art and their meaning is well recognized. For example, a search in the online database of the USPTO for published U.S. patent applications which contain at least one of these two terms in the specifications thereof affords more than 3,000 hits. Further, even one of the documents cited by the Examiner, i.e., BLANK, uses this term in the specification (see top of column 2). Accordingly, there clearly is no basis for the broad definition of the term "superabsorber" that the Examiner has adopted in the present rejection.

Still further, while PARK mentions polymers that belong to certain generic classes of polymers, which classes comprise polymers that may be used as superabsorbers (superabsorbents), according to PARK these polymers are used exclusively as humectants. In this regard, Applicants point out again that it is well known that two specific polymers which belong to the same generic class of polymers may have entirely different properties due to differences in, for example, molecular weight, (degree of) cross-linking, if any, copolymerized monomers, (degree and type of) derivatization of functional groups, if any, to name but a few. Accordingly, the mere fact a specific polymer may be useful as superabsorbent clearly does not mean that any polymer that belongs to the same generic class of polymers is a superabsorbent. Consequently, in the absence of evidence to the

contrary, the polymers which are mentioned by PARK for use as humectants cannot reasonably be assumed to be also useful as superabsorbents, even if there may be specific polymers which belong to the same generic class of polymers as the humectants of PARK and which exhibit superabsorbent properties.

In this regard, Applicants also point out that the Examiner has not provided a single example of a specific polymer of any class of polymers which can be used as both humectant and superabsorbent.

For at least all of the foregoing reasons, the rejection of claims 23, 24, 103, 106-126, 129 and 130 under 35 U.S.C. § 103(a) over GANSTER in view of GILCHRIST and PARK is without merit and should be withdrawn as well, which action is respectfully requested.

Response to Rejection of Claims under 35 U.S.C. § 103(a) over GANSTER in View of GILCHRIST and BOWDITCH

Claims 23, 24, 103, 104, 106-126 and 129-132 are (newly) rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GANSTER in view of GILCHRIST and further in view of BOWDITCH. The rejection alleges that BOWDITCH teaches a hydrophilic polyurethane foam that is particularly suited for use in external biomedical applications as, for example, a laminated medical/surgical dressing and that additional hydrophilic polymers may be incorporated with the foam to increase the capacity to absorb aqueous liquids such as, e.g., ARASORB® which is a copolymer of acrylic acid and potassium acrylate which holds over 800 times its weight in water. The rejection further asserts that BOWDITCH's foam may be incorporated in any layered dressing in which an absorbent layer is necessary or desirable, wherefore it is allegedly obvious to incorporate

BOWDITCH's materials in the materials/products of GANSTER (as modified by GILCHRIST).

Applicants respectfully traverse this rejection. Specifically, unlike GANSTER, BOWDITCH relates to polyurethane foams which are made by a specific two-stage process wherein a prepolymer derived from a diphenylmethane diisocyanate-containing isocyanate product with a functionality of greater than 2.0 and a polyol having at least about 50% by weight oxyethylene groups are mixed, blown with a substantially nonaqueous blowing agent and cured (see e.g., claim 1 of BOWDITCH) to produce hydrophilic flexible foams which demonstrate superior drape, stretch and recovery (see, e.g., abstract of BOWDITCH). The polyurethanes of GANSTER, on the other hand, are prepared from conventional starting materials (and in particular, from an aliphatic diisocyanate, hexamethylene diisocyanate, instead of the aromatic diisocyanate employed by BOWDITCH) and by conventional processes. Drape, stretch and recovery as properties of these polyurethanes do not appear to be addressed in GANSTER at all.

Further, while GANSTER mentions, *inter alia*, foamed hydrophilic gel compositions in column 4 thereof these foamed compositions are not particularly recommended and only a small fraction of the numerous specimen described in the Examples of GANSTER appear to be foamed (with nitrogen).

Moreover, while the polyurethane gels of GANSTER are self-adhesive (see, e.g., col. 2, lines 3-4), the foamed polyurethanes of BOWDITCH do not appear to have this property. For example, Example III of BOWDITCH expressly refers to an (apparently desired) "tack-free cure" of the foam.

For at least all of the foregoing reasons, one of ordinary skill in the art would not be motivated to combine the teachings of GANSTER and BOWDITCH.

At any rate, even if one were to assume, *arguendo*, that one or ordinary skill in the art would be motivated to include the superabsorbent of BOWDITCH in a foamed hydrophilic gel composition of GANSTER which is intended to contact a wound and/or skin, Applicants are unable to see why one of ordinary skill in the art would want to further include at the same time (short) glass fibers as filler in this foamed gel composition. After all, a main purpose of the superabsorbent and a foamed composition comprising same is to absorb as much fluid as possible. It is not seen which useful purpose glass fibers would be able to serve in this context. Generally speaking, it is not seen that one of ordinary skill in the art would be motivated to include glass fibers as filler in any polymer composition which is foamed, let alone in a composition which is to contact a wound and/or skin.

Regarding claim 131 and claim 132 dependent therefrom it is additionally submitted that claim 131 recites a self-adhesive unfoamed polyurethane resin. BOWDITCH, on the other hand, fails to teach or suggest any unfoamed materials.

In view of the foregoing, it is submitted that a combination of the teachings of GANSTER, GILCHRIST and BOWDITCH is unable to render obvious the subject matter of present claims 23, 24, 103, 104, 106-126 and 129-132, wherefore withdrawal of this rejection is warranted and respectfully requested.

Response to Rejection of Claims under 35 U.S.C. § 103(a) over GANSTER in View of GILCHRIST and BLANK

Claims 23, 24 and 103-132 are (newly) rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GANSTER in view of GILCHRIST and further in view of BLANK. The rejection alleges that BLANK teaches an antimicrobial superabsorbent composition which comprises a cross-

linked hydrophilic sodium salt form of a partially neutralized acrylic acid-based polymer gel having covalently bonded thereto a silane, and that BLANK's compositions have a wide range of applications, including as bandages and woven or unwoven materials, such as surgical gauze. The rejection further alleges that "[a]n ordinary skilled artisan would have been motivated to modify Ganster's materials/products to incorporate Blank's materials as an absorbent layer, because one utility of Ganster's materials/products is as a wound dressing/bandage that absorbs blood and wound secretions". The rejection also alleges that "[a]n ordinary skilled artisan would have had a reasonable expectation of success, because the absorbent materials utilized by Blank's compositions have both antimicrobial and superabsorbent properties".

This rejection is respectfully traversed as well. In particular, BLANK neither teaches nor suggests incorporating the antimicrobial superabsorbent composition described therein into any resin, let alone a polyurethane resin like that described by GANSTER. For example, according to the abstract of BLANK the composition "may be applied to a substrate in the form of a coating". Independent claims 1 and 5 of BLANK are drawn to an article of manufacture which comprises an outer layer (at least one layer) of an organosilane treated polymer gel and an inner layer (at least one layer) of the polymer gel which is free of the organosilane. For this reason alone, a combination of the teachings of GANSTER and BLANK would not result in the subject matter of the rejected claims.

Moreover, even if one were to assume, *arguendo*, that one of ordinary skill in the art would be motivated to incorporate the antimicrobial superabsorbent composition of BLANK into the polyurethane compositions of GANSTER (regardless of whether or not the self-adhesive properties

thereof are impaired or sacrificed thereby), it is not seen why in this case there would be motivation to incorporate an additional antimicrobial material, i.e., the antimicrobial glass of GILCHRIST, into these compositions.

Applicants submit that for at least all of the foregoing reasons a combination of the teachings of GANSTER, GILCHRIST and BLANK fails to render obvious the subject matter of any of the rejected claims, wherefore withdrawal of the rejection of claims 23, 24 and 103-132 under 35 U.S.C. § 103(a) over these documents is respectfully requested as well.

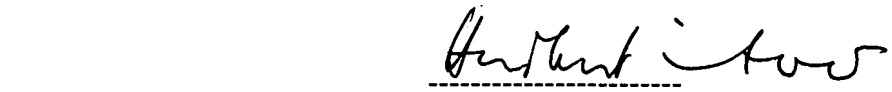
Response to Remaining Rejections under 35 U.S.C. § 103(a)

All of the remaining rejections under 35 U.S.C. § 103(a) set forth in the present Office Action relate exclusively to dependent claims and are all based on a combination of the teachings of GANSTER, GILCHRIST and at least one further document. As set forth above, the claims from which all of these claims depend either directly or indirectly, i.e., claims 1, 103 and 131 are not rendered obvious by GANSTER in view of GILCHRIST. For this reason alone, none of the dependent claims is rendered obvious, either. In view thereof, Applicants again refrain from commenting on the remaining rejections of the dependent claims set forth in the present and the previous Office Actions and the remaining documents cited in connection therewith. It is emphasized, however, that it still is Applicants' position that each of these remaining rejections is without merit as well and should be withdrawn.

CONCLUSION

In view of the foregoing, it is believed that all of the claims in this application are in condition for allowance, which action is respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

Respectfully submitted,
Wolfgang MEYER-INGOLD et al.



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Reg. No. 50,417

May 10, 2007
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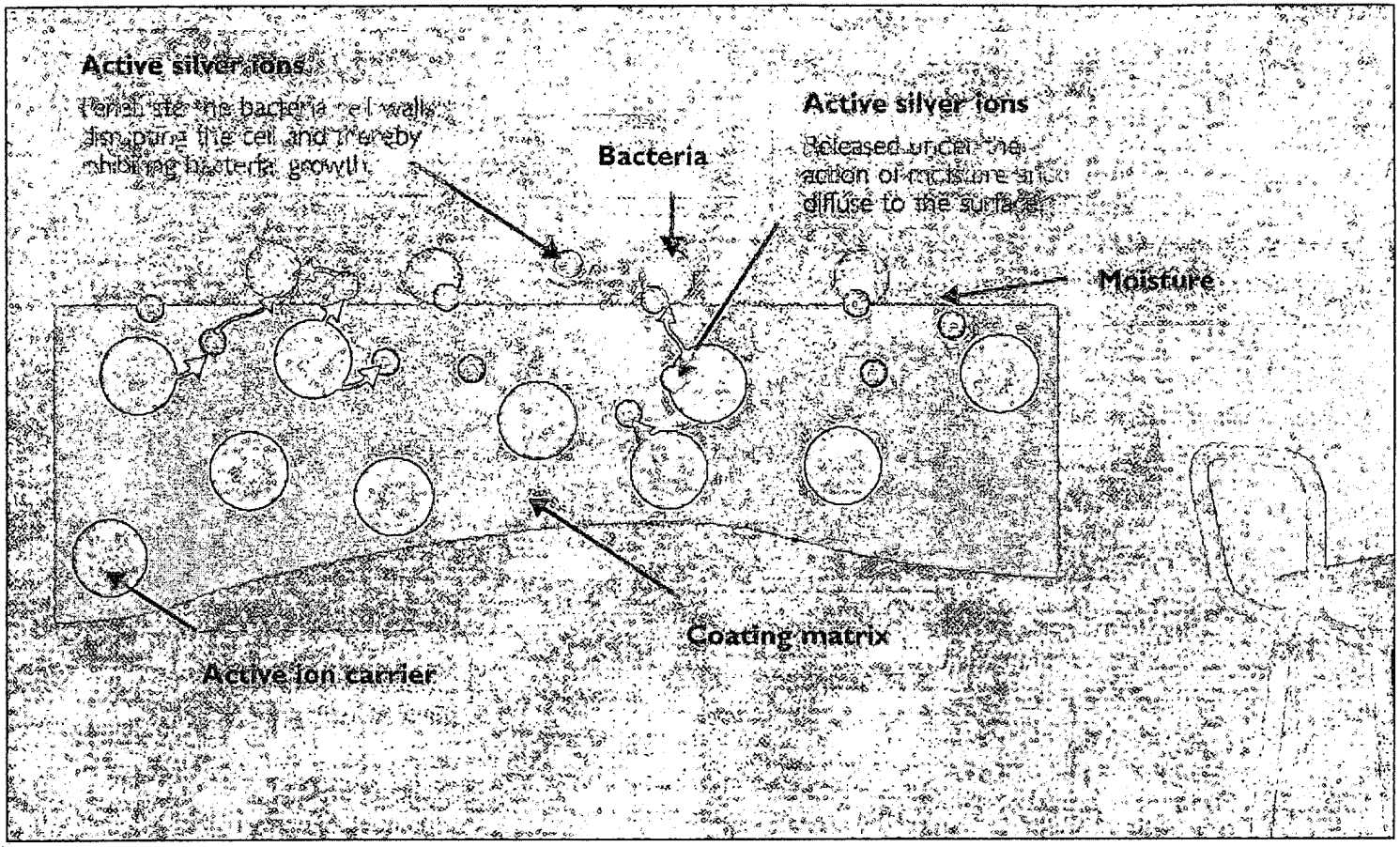
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191

Interpon Antibacterial Powder Coating

Return to front page

In today's Hospitals and Aged Care facilities, there is an increasing awareness of the need to limit the spread of bacteria-related illness. Not only do these illnesses increase the possibility of further health complications for patients, they also cost the Healthcare industry time and money.

Antibacterial powder coating technology has been successfully utilised in the past by domestic appliance manufacturers, where limiting bacterial growth is a necessary contributor to their hygenic use. Now with the support of the world's largest powder coating manufacturer Akzo Nobel, K Care is introducing this innovative concept to the Australian Healthcare industry.



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Interpon AB powder coating contains silver ions which when in the prescence of moisture, are released and diffuse to the surface. These silver ions are then absorbed through the thin bacteria cell walls where they inhibit the growth of the organism by disrupting the vital cellular activities and destroying bacterial

function.

Silver is a well documented bactericide that is not harmful to human health and does not promote resistance in bacterium.

Interpon AB complements good hygiene practices and should never be used to reduce or replace existing cleaning programs.

Interpon AB
Antibacterial Powder Coating

An independent laboratory has carried out tests on Interpon's AB powder coating to the internationally recognised Standard JIS 2801:2000. The results exhibited up to a 99.9% reduction in bacterial population across the following species.

Bacteria	Interpon AB	Other Powders
Listeria monocytogenes	✓	?
Escherichia coli 0157	✓	?
Salmonella enteritidis	✓	?
Staphylococcus aureus (MRSA)	✓	?
Staphylococcus aureus	✓	?
Bacillus subtilis	✓	?
Pseudomonas aeruginosa	✓	?
Salmonella typhimurium	✓	?
Streptococcus faecalis	✓	?
Legionella pneumophila	✓	?
Vibrio parahaemolyticus	✓	?
Enterobacteria aerogenes	✓	?

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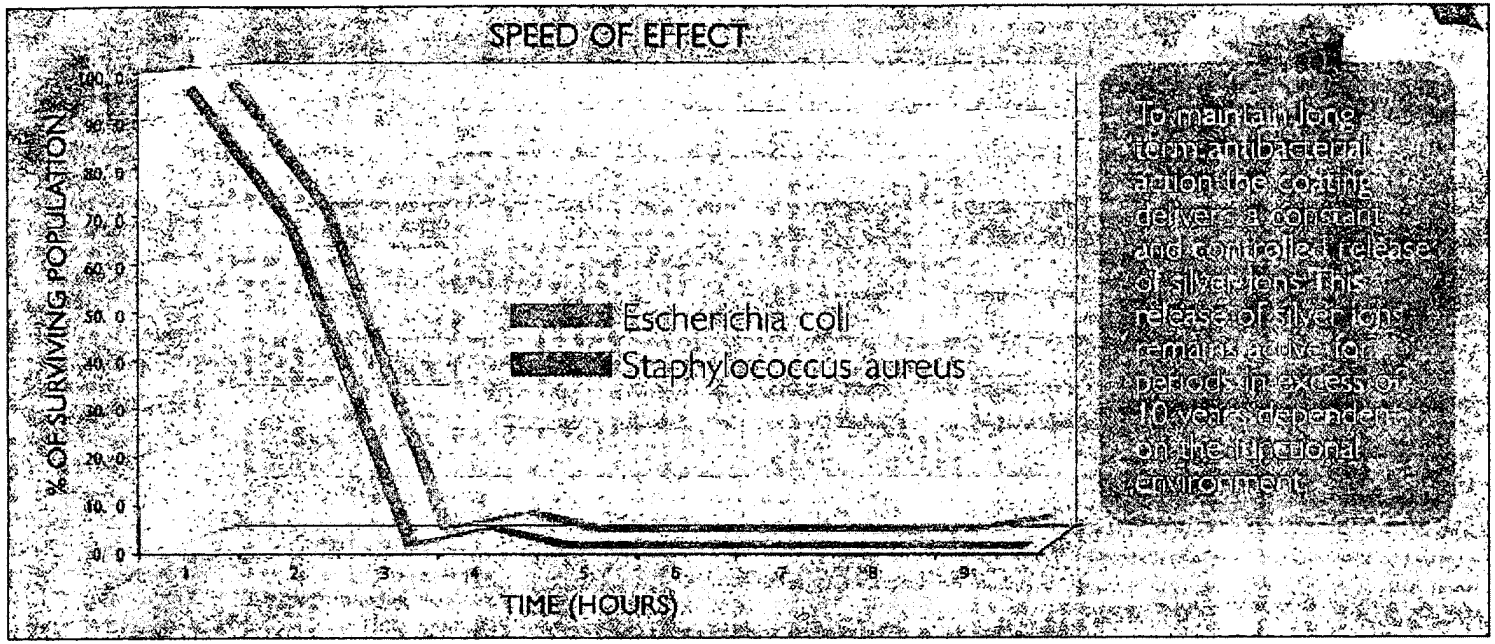
Interpon AB in independent laboratory tests, has been shown to achieve an effective reduction if bacteria within 4 hours of innoculation.



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This unique powder coating technology is available as standard on the following bathroom and toileting products:

- KA220ZA Shower Chair
- KA222ZA Shower Stool
- KA222ZA Maxi Shower Stool
- KA230Z Mobile Economy Shower Chair
- KA410Z Toilet Seat Raiser
- KA430Z Folding Toilet Seat Raiser
- KA440 Toilet Surround

Active Quartermaster Antibacterial

Be safe be anti-bacterial

Is it effective?

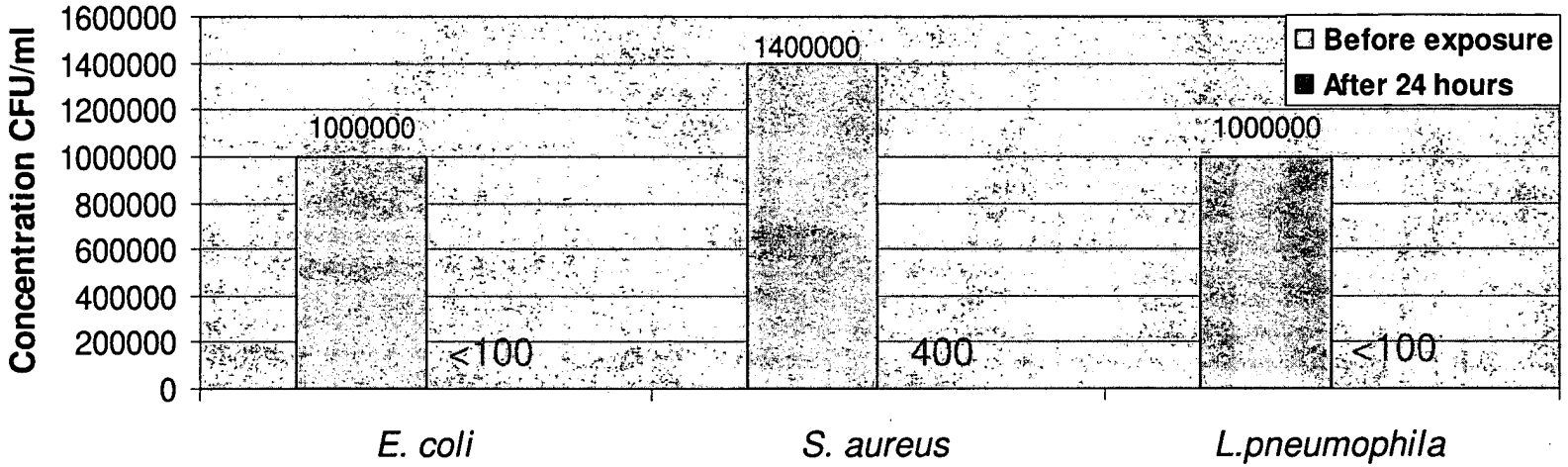
The prestigious Louis Pasteur Institute have tested it and found it to be so, their results are presented in the graphs.

ACTIVE Laboratory Testing

Results

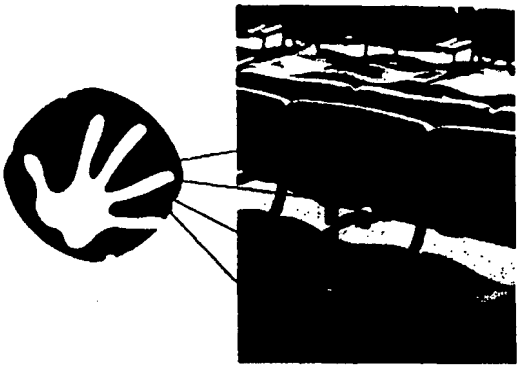
- Typical effect of RILSAN ® ACTIVE ® T grey 7546 SA on micro-organisms contamination on coating surface (according to JIS Z 2801 : 2000)

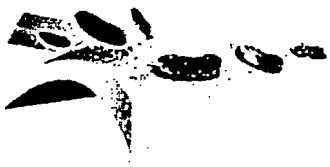
Rilsan®ACTIVE® effect on microorganisms on coating surface



- **More than 99.99 % Cfu/ml** (colony forming unit per ml) **decrease in 24 hours**

Inhibiting the growth of microbes





Polygiene Technology

Polygiene is a breakthrough, patented antimicrobial technology that employs ionic silver to inhibit the growth of micro-organisms. Independent tests have shown the technology to have high efficacy against harmful bacteria and fungi, and even against the SARS Co virus when used with products manufactured from amino moulding compounds.

Test institutes & standards

Testing of Polygiene has been carried out at the following independent institutes:

The Medical Institute of Microbiology, University of Milan, Italy
The Virology Institute, University of Catania, Italy
The Swedish Institute for Food and Biotechnology (SIK), Gothenburg, Sweden
LawLabs, Birmingham, UK
IMSL, Berkshire, UK
Institute of Microbiology and Epidemiology, Military Academy of Medical Science, Beijing, China

The following standards have been implemented during testing:

For hard surfaces: JIS 2801
For textiles ATCC 100